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The Ability of Work Related Rewards to Predict the **Organizational** Commitment of
Health Occupations Education Teachers

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Abstract: The purpose of this study was to explore the ability of extrinsic and intrinsic work related rewards to **predict** the organizational commitment of health occupations education teachers. The dependent variable was organizational commitment. The independent variables included the intrinsic work **related** rewards--autonomy, significance, and involvement; and the extrinsic work related rewards--supervision, coworkers, promotion, general working conditions, and salary. Stepwise multiple regression analysis revealed a model for health occupations education teachers which included two intrinsic and one extrinsic work related rewards.

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The Metropolitan Life Survey of the **American** Teacher (Metropolitan Life **Insurance** Company, 1984) **identified** a number of problems facing teachers and the teaching profession. This report indicated that low salaries, poor working conditions, lack of prestige, and limited input into school decisions have caused dissatisfaction and excessive turnover in the teaching profession. Today, ***total quality management, school restructuring, and teacher and student empowerment are*** just a few of the buzz words being used to suggest reforms **in** the current educational crisis.

Literature that addresses educational reform includes **Educational Renaissance** by **Cetron** and **Gayle** (1991), who devote one chapter of the book to the **examination** of teaching, a profession in chaos. In 1987, they found the annual salary for beginning teachers averaged \$17,500; by comparison, beginning accountants earned approximately \$21,200, **computer** specialists earned \$26,170, and engineers earned \$28,5(XI. The pay scale has improved little since then. Because of starting salaries, teachers' colleges are unable to recruit the best students. Teacher educators point out that there are too few teachers to go around and predict that this shortage will continue well into the 21st century. By the time a teacher has been teaching in the classroom for five years, there is a 50% chance that he or she **will** leave the profession; if the teacher is employed in an urban area, that chance increases to 75%. Why this high dropout rate among teachers? **Lack** of commitment, stress, burnout, poor salaries, and lack of power in the school have all been suggested as possible precursors of teachers leaving the profession. To **counteract** the high dropout rate, the profession needs to seek answers to these and other questions concerning the work related rewards of teachers. Teaching does not occur within a vacuum. Schools, school **administrative personnel**,

teachers and their attitudes toward the **organizations** in which they work. O'Brien, Akroyd, and Richards (1993) noted that

. . . some teachers **report** being extremely pleased with their schools **and** school systems, and appear to be quite dedicated to the overall success of those **organizations**. Often, such teachers are more **involved** in **general** school activities and usually enjoy pleasant longevity in their positions. Other teachers, however, **report** being very displeased with their schools and consequently are disinterested in the overall **success** of their schools. These teachers tend to be involved in the **general** activities of their schools as little as possible and may actively seek reassignment or relocation. In many ways, the organizational commitment of teachers is vital to the overall effectiveness of schools.

(p. 4)

The purpose of this study was **to** explore the ability of extrinsic and intrinsic work rewards to predict the organizational commitment of health occupations education teachers. A review of the literature revealed that only a few studies have focused on the work **related** rewards of vocational teachers. One study (**Akroyd**, Richards, & O'Brien, 1992) reported the predictive value of work related rewards as determinants of health occupations education teachers' work satisfaction. Another study (**Berns**, 1989) **identified** the work related rewards of marketing education teachers. O'Brien, Akroyd, and Richards (1993) studied the work satisfaction and organizational commitment of marketing education **teachers**. No research studies addressed the organizational commitment of health occupations education teachers.

work **Related** Rewards

The literature revealed that work **related rewards** were **studied** most commonly in reference to their relative importance as **determinants** of WO* satisfaction. **Herzberg** (**Herzberg**, Mausner, Peterson, & **Capwell**, 1957) proposed two **basic** classes of work rewards: (a) intrinsic factors such as achievement, recognition, and **advancement**; and (b) extrinsic factors such as pay, working conditions, and job security. Work satisfaction is viewed as the level and direction of an emotional state, or affective orientation, resulting from the appraisal of one's work and work experience and, in part, is a function of the individual's work rewards (**Kallenberg**, 1977; Locke, 1976; Ronen, 1978). Most theorists **have** argued that the overall **level** of work satisfaction is determined by some combination of the various facets of work rewards such as satisfaction with salary, coworkers, **and** **supervisors**. They have agreed that a two-factor model appears to explain the general trends reflected in the data (Campbell & Pritchard, 1976; Dyer & Parker, 1976). **Mottaz** and Potts (1986) found the perceived reward model to be the most appropriate procedure for predicting overall work satisfaction. The model consisted of three intrinsic rewards: task autonomy, task significance, and task involvement; and six extrinsic rewards: supervisors, coworkers, working conditions, salary, promotional opportunities, and fringe benefits.

Akroyd et al. (1992) found that selected intrinsic and extrinsic rewards were predictive of health occupations **education** (HOE) teachers' work satisfaction. Task involvement, an intrinsic reward, contributed more to HOE teachers' perceptions of their work satisfaction than general working conditions and salary, extrinsic rewards, but **all** three were **significant** at the .01 level.

Mowday, Porter, and Steers (1982) offered a definition of **organizational** commitment which has three components (a) **a strong** belief in and **acceptance** of **organizational** goals and values, (b) a willingness to **exert** considerable effort on behalf of the **organization**, and (c) a strong desire to maintain membership in the organization. **Research** on **organizational** commitment has been examined primarily in relation **to** turnover (Ferris & **Aranya**, 1983; Horn, Katerberg, & **Hulin**, 1979; **Huselid** & Day, 1991; Mow&y, Steers, & Porter, 1979; O'Reilly & Caldwell, 1980; Steers, 1977; Stumpf & **Hartman**, 1984; Wiener & Vardi, 1980). Other research has established a relationship between job satisfaction and turnover intentions (**Angle** & Perry, 1981; **Bedeian** & Armenakis, 1981) and organizational commitment and job performance (Meyer, **Paunonen**, **Gellatly**, **Goffin**, & Jackson, 1989). Individuals who are committed to the organization are less likely to leave their jobs than those who are uncommitted (Porter, Steers, Mowday, & **Boulain**, 1974). Individuals who are committed to the organization tend to perform at a higher level and also tend **to** stay with the organization, thus decreasing turnover and increasing organizational effectiveness. As this nation's schools face a shortage of vocational teachers, more research on organizational commitment is required.

Porter, Crampon, and Smith (1976) investigated the relationship between organizational commitment and turnover. Using a 15 month longitudinal design with a sample of managerial trainees in a large merchandising company, they found that trainees who voluntarily left the company during the initial 15 month employment period had begun to show a definite decline in commitment prior to termination.

Shaw and Reyes (1992) examined elementary and high school teachers' organizational commitment and workplace values orientation. The values orientation included two underlying value systems. The normative orientation emphasized the cultural values of the organization. Schools with a normative value orientation stress shared behavior norms developed through common group experiences, and are less reliant on formal written policy and pay and time schedules. The utilitarian orientation emphasized the materialistic aspects of organizational control. Schools with a utilitarian value orientation stress scheduling and written policies to regulate teacher work load, teaching, and extra **duty** assignments. The authors found that elementary school teachers had **significantly** higher levels of normative orientation and organizational commitment than high school teachers. In another study, Reyes (1990) reported similar findings:

First, it is clear that in those organizations holding a stronger normative orientation, employees are more satisfied with their jobs and **are** more committed to the organization than employees in organizations holding a stronger utilitarian orientation. (p. 20)

O'Brien et al. (1993) found that two intrinsic rewards (**significance** and involvement) and three extrinsic rewards (supervision, coworkers, and general working conditions) were significant at the .01 level in predicting organizational commitment of marketing education teachers. They observed that supervision manifested the largest standardized beta weight. Although this is unusual in context of the related **literature**, they believed that supervision may be a function of the critical leadership role that principals **fulfill** within effective secondary schools.

Purpose of the Study

The purpose of this study was to explore the ability of extrinsic and intrinsic work rewards to predict the organizational commitment of health **occupations** education teachers. Specifically, which intrinsic and extrinsic work related rewards **significantly** contributed to the **health** occupations education teachers' perceptions of **organizational** commitment?

Methodology

Subjects

Subjects examined in this study were health occupations education teachers from **three** states. The three states included **North** Carolina, Georgia, and **Tennessee**. State **departments** of education provided lists of teachers in the **program** area.

Instrumentation

The instrument consisted of four parts: (a) sample demographic characteristics, (b) extrinsic work related rewards, (c) intrinsic work related rewards, and (d) organizational commitment. The extrinsic and intrinsic work related rewards and organizational commitment were rated on a four point **Likert-type** scale: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The extrinsic and intrinsic work related rewards were measured using an instrument developed by Mottaz (1981). Organizational commitment was measured using the **Organizational** Commitment Questionnaire (**OCQ**) developed by Mowday et al. (1979).

The five extrinsic work related rewards included general working conditions, supervision, coworkers, promotion, and salary. General working conditions were defined as the extent to which there were adequate resources to teach, and addressed physical facilities,

equipment, workload, and work hours. The second reward, **supervision**, was **defined** as the degree to which supervisors were perceived as **supportive** and helpful to **teachers**, and included such traits as competence, fairness, and friendliness. **Coworkers**, the third reward, were defined by the degree to which colleagues **were** perceived as being supportive and helpful, and included such traits as competence, helpfulness and friendliness. The fourth reward, promotion, was defined as the extent to which the job provided opportunity for advancement, and included both opportunity and fairness. Salary, the **fifth** reward, was defined as the extent to which teachers believed their salary to be comparable to other teachers performing a similar function, and included amount, fairness, and adequacy. **Mottaz** (1985) reported the reliability of these measures as assessed by **Cronbach's** alpha, which yielded a reliability coefficient of .71 for general working conditions, .82 for supervision, .82 for co-workers, .82 for promotion, and .83 for **salary** (pp. 369-370). **Mottaz** (1985) evaluated the construct validity of these scales by factor analysis. Principal components factor analysis with **varimax** rotation **confirmed** distinct **factors** which defined each of the scales.

The three intrinsic work related rewards involved facets associated with one's job, and included task autonomy, task **significance**, and task involvement. Task autonomy was defined as the degree of self-direction in task performance or teaching. Task **significance** was defined as the degree to which the task was **perceived** as a **significant** contribution to the work process or teaching. Task involvement was defined as the degree to which the task was considered interesting and rewarding in itself. **Mottaz** (1985) reported the reliability of these measures to be .92 for the autonomy scale, .79 for the **significance**

scale, and .88 for the involvement scale (p. 369). Principal components factor analysis with **varimax** rotation **confirmed** distinct factors which defined each of the three scales.

The organizational commitment questionnaire consisted of 15 statements. Mowday et al. (1979) reported a median coefficient alpha of .90 with a range of .82 to .93 for 2,563 employees in nine different public and private work organizations. The authors examined the construct validity through factor analyses. The analyses resulted in a single-factor solution and **supported** the conclusion that the items measured a single common underlying construct.

Data Collection

A cover letter, questionnaire, and a **pre-addressed** stamped envelope were mailed to all health occupations education teachers (348) in Georgia, North Carolina, and Tennessee. The questionnaire could be completed within 10 to 20 minutes. A follow-up letter **was sent to all** teachers who did not respond within two weeks. Questionnaires were **returned** by 193 (55%) health occupations education teachers.

Data Analyses

Data from the questionnaires were entered into a database and analyzed using Version 6.4 of **PC-SAS** (SAS Institute, Inc., 1987). Frequency **distributions** and **cross** tabulations were used to confirm statistical assumptions. Correlation analyses **identified** the **Cronbach** coefficient alpha for the dependent variable and each independent variable. A stepwise multiple regression analysis was run to identify which independent variables (extrinsic and intrinsic factors) were predictors of the dependent variable, organizational commitment, for health occupations education teachers. The magnitude of contribution of each **significant** variable was determined by its **standardized** beta weight. A standardized beta weight close to

1.0 indicates a substantial contribution, while a weight close to 0.0 denotes little or no contribution (Pedhazur, 1982). A conservative **significance** level of .01 was used in all statistical interpretations due to the amount of variance not accounted for by the model.

According to **Tabachnick** and **Fidell** (1983), **stepwise** regression **is** used to answer the question regarding the best linear **combination** of independent variables to **predict** the dependent variable in the sample. **Specific** to this study, the question could be stated as, “Which extrinsic and intrinsic (independent variables) work related rewards **were predictive** of organizational commitment (dependent variable)?” In stepwise **regression**, the sample data, not the researcher, control the order of entry into the model for independent variables. Each independent variable is entered separately into the **regression** equation according to the amount of unique variance it explains after the other variables’ effects are taken **into** account. Thus, stepwise regression analyses **are** seen as model-building **rather** than model-testing procedures.

Results

Analysis of the multiple regression model yielded significant results. Five of the eight independent variables entered the stepwise **model** for health occupations education teachers with three of the five significant at the .01 level. **In** this section, **reliability** scores are reported for the dependent and independent variables. Then the results are organized and reported as they relate to the purpose and research question.

Reliability

Cronbach’s coefficient alpha for the dependent variable, organizational commitment, was .88, well within the range of .82 to .93 reported by Mowday et al. (1979), The scales

measures of the Ability of Work Rewards to Predict Organizational Commitment, .85 for **significance**, and .85 for involvement alphas for the extrinsic factors of work related rewards were .69 for general working conditions, .90 for supervision, .82 for coworkers, .92 for promotion, and .71 for salary. In comparing Mottaz's (1985) reliability findings for the intrinsic factors, two scales yielded smaller reliabilities: autonomy and involvement, while one scale, **significance**, yielded a slightly higher **reliability from** this study. In **comparing** the extrinsic factors of job satisfaction, two **scales** had smaller reliabilities: general working conditions and **salary**; two **scales** had higher reliabilities: supervision and promotion; while one scale had the same reliability y: **coworkers** from this study. Nevertheless, **all** reliability scores fell within an acceptable range.

Research Question

Which intrinsic and extrinsic work related **rewards significantly** contributed to the health occupations education teacher's perceptions of organizational commitment? Table 1 reports the standardized beta weights for those variables which the stepwise procedure incorporated into the **model** to explain the predictive **ability** of the independent variables in relation to organizational commitment of health occupations education teachers. Two intrinsic and one extrinsic work related awards were significant at the .01 **level**. The factors, in order of their standardized beta weights, included **significance** (.2411), involvement (.2135), and general working conditions (.1591). Although supervision and coworkers were included **in** the stepwise model, neither factor was significant at the .01 level. Task autonomy, an intrinsic reward, and salary, an extrinsic reward, did not enter the model. Together, the independent variables accounted for 34% of the variance in the dependent variable **in** the health

Table 1

Standardized Beta Weights of Independent Variables on Organizational Commitment for Health Occupations Education Teachers

Variable	Standardized Beta Weights
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Significance	.2411*
Involvement	.2135*
General Working Conditions	.1591*
Supervision	.1539
Coworkers	.1169

Model Statistics:

R-Square= .34 F=21.21 p=.0001

*p < .01

occupations education model. From the model, it appears that health occupations education teachers perceive the following as predictors of organizational commitment: (a) **significance**, work is worthwhile and makes an **important** contribution to teaching; (b) **involvement**, work is interesting and challenging and provides a sense of personal **fulfillment** from helping students reach their potential; and (c) **general working conditions**, there are adequate resources to teachers and addressed physical facilities, equipment, workload, and work hours.

Discussion

Five independent variables entered the model on **organizational** commitment for health occupations education teachers. Of these five variables, only **three** were significant at the .01 level. The three variables with their standardize beta weights included (a) significance-- .2411, (b) involvement-- .2135, and (c) general working conditions-- .1591. **These** same three variables were **identified** by O'Brien et al. (1993) for marketing education teachers. O'Brien et al. (1993) reported that five independent variables were **significant** for organizational commitment of marketing education teachers. The five variables with their standardize beta weights included (a) supervision-- .2271, (b) **significance-- .2241**, (c) involvement-- .1982, (d) coworkers--- .1446, and (e) general working conditions--- .1268.

Similarly, both health occupations education and marketing education are program areas of vocational education. The program areas differ in their approach to teacher **certification**. Marketing education teachers follow the traditional path to teacher **certification**. They are graduates of four-year baccalaureate **programs** in teacher education. Socialization of the students into the teaching profession occurs through courses which provide interactions **and** experiences with schools, their principals, and teachers. These courses include both observational and actual hands-on teaching experiences under the close supervision of **cooperating** teachers employed by the secondary schools. Thus, these graduates have **many** opportunities to explore and experience the actual job performance of teachers and **become** familiar with the mores of the schools in which they expect to be employed as future teachers.

The same does not hold true for health occupations education teachers. These teachers do not follow the traditional path to teacher certification; they are employed as teachers based on their health specialties (usually nursing) and years of experience in the specialty. They come **directl y** from industry without prior experiences in the school system. Courses in pedagogy are taken only **after** they are employed as secondary teachers. Therefore, health occupations **education** teachers have no opportunities to explore and experience the actual job performance of teachers or the mores of the schools.

These two paths to teacher **certification** may explain the differences in the perceptions of the two groups of teachers. Marketing **education** teachers pereieved supervision as the most important variable in their organizational commitment. Through their **previous** school experiences, they have had more opportunities to interact with and recognize the importance of school administrators who are supportive and helpful to them in their roles as teachers. Health occupations education teachers have had no such previous school experiences. In their previous roles in industry, they served as independent health care practitioners requiring **little** or no supervision. They were considered the experts in their respective fields. Although supervision entered the health occupations education model, it was not significant at the .01 level.

Two intrinsic rewards, **significance** and involvement, were **significant** to the organizational commitment of both groups of teachers. Both groups **perceived** their work as worthwhile, really important, and making an important contribution to teaching (significance). Both groups also viewed their work as interesting and challenging and derived a sense of personal fulfillment from helping students reach their potential

(involvement). **Typically, teachers** work in isolation within their classrooms. The feelings of isolation can be counteracted (a) by school **administrators** who **are perceived** as helpful and supportive; (b) by coworkers who **are** friendly and willing to share their **expertise**; (c) through promotional practices which promote equal opportunity for advancement and recognize teachers' strengths; and (d) through general working conditions which provide adequate **resources**, supplies, and equipment for effective classroom teaching.

The only extrinsic variable found in both models of organizational commitment **was** general work conditions. Both groups of the teachers were concerned with having adequate equipment, supplies and resources for effectiveness in the classroom.

The study yielded important information on what factors contributed to the **organizational** commitment of health occupations education teachers. Schools **administrations** could use this information to increase satisfaction and **reduce** turnover of teachers in the secondary schools. In North Carolina alone, turnover **accounted** for a substantial number of the 50 plus new health occupations education teachers needed for the 1993-1994 school year. Although administrators are unable to affect directly teachers' intrinsic values, **Akroyd et al. (1992)** noted that administrators can modify extrinsic factors in the environment to **maximize** the effect of such intrinsic values (p. 19). Administrators can provide a supportive environment for teachers by providing (a) equal and fair promotional **opportunities** for all teachers, (b) opportunities for teachers to interact and be supportive of one another, (c) supervision which is perceived as helpful and **supportive** by the teachers, (d) the resources and equipment that teachers need to be effective in their classrooms, and (e) public information on the need to

improve teacher salaries. Effective schools require effective **administrators** and effective teachers. The contributions of effective **administrators** are paramount to increasing the work satisfaction and organizational commitment of teachers.

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